7. The OLED array substrate claim 1, wherein the barrier is disposed in a projection area of the black matrix onto the base substrate.

8. A display device, comprising the OLED array substrate of 1.

9. The OLED array substrate of claim 1, wherein a second protection layer is further disposed between the color filter layer and the thin film transistor; and the via further penetrates the second protection layer.

10. The OLED array substrate of claim 1, wherein the color filter layer includes color filters with different colors, and adjacent color filters with different colors are contacted with each other.

11. A method of manufacturing an OLED array substrate, comprising:

forming a pattern comprising a plurality of thin film transistors on a base substrate;

forming a pattern comprising a color filter layer below a black matrix;

forming a pattern comprising both a first protection layer and the black matrix, wherein the first protection layer and the black matrix are disposed in a same layer, the black matrix being located over each thin film transistor and provided with a via, the the black matrix overlaps the color filter layer partially, and the via penetrates a portion where the black matrix overlaps the color filter layer partially; and

forming a pattern on the black matrix, the pattern comprising a first electrode, a barrier, a luminescent layer, and a second electrode, wherein the first electrode is connected with the thin film transistor through the via, and the first electrodes disposed over adjacent thin film transistors are separated from each other by the barrier.

12. The method of claim 11, wherein the luminescent layer is color luminescent layer.

13. The method of claim 11, wherein after the step of forming the pattern comprising the plurality of thin film transistors on the base substrate, the method further comprises:

forming a pattern comprising a second protection layer;

wherein the via further penetrates the second protection layer.

14. The method of claim 11, wherein the first electrode is anode, and the second electrode is cathode; or

the first electrode is cathode, and the second electrode is anode.

15. The method of 11, wherein the luminescent layers formed over adjacent thin film transistors are separated from each other by the barrier.

16. The method of 11, wherein the barrier is disposed in a projection area of the black matrix onto the base substrate.

17. The method of claim 11, wherein the color filter layer includes color filters with different colors, and adjacent color filters with different colors are contacted with each other.

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